

KENTUCKY COUNTY HEALTH PROFILES, 1999

SUMMARY

HEALTH AND SOCIAL INDICATORS

POPULATION: Accurate and reliable population estimates are fundamental to any population-based health status analysis. All population figures used in this report are 1999 estimates provided by Kentucky Population Research, Urban Studies Institute, University of Louisville, and all population-based rates have been computed using these estimates. These estimates were provided in three racial categories: White, Black (African American), and Other. Races other than White and Black comprised less than one percent of the estimated population of Kentucky in 1999. Therefore, due to limitations of space and the extremely small numbers of the Other population at the county level, statistics disaggregated by race in this report are presented for the White and Black populations only.

Also due to limitations of space, rates for many indicators in this report have not been included. Basic population data have been provided to allow the reader to calculate additional rates as need be.

TOTAL BIRTHS: Birth statistics are extremely important measures of health status as they serve as an indicator of a broad range of nutritional, environmental, and other health-related factors in a population.

Crude birth rate: In 1999, the crude birth rate in Kentucky was 13.8 births per 1,000 population, unchanged from the previous year. The rate ranged from 8.0 per 1,000 in Lyon County to 21.0 per 1,000 in Christian County.

Under 18 birth rate: Births to teen mothers are a major public health concern as they are associated with higher rates of low birthweight and infant mortality and create educational, social, and economic problems for both mother and child. In 1999, the under 18 age-specific birth rate in Kentucky was 12.3 births per 1,000 females aged 10-17, down slightly from 12.9 in 1998. The rate ranged from 28.1 per 1,000 in McLean County to 2.0 per 1,000 in Bracken County. Statewide, 4.8% of all births were to mothers under 18, a decrease from 5.2% in 1998.

Weight less than 2,500 grams: Low birthweight is a major contributing factor in infant mortality and long-term disability. In 1999, 8.3% of children born in the state weighed less than 2,500 grams (5 lb. 8 oz.), virtually unchanged from the

1998 rate of 8.2%. By county, this percent varied from a high of 18.6% in Ballard County to a low of 2.3% in Lee County.

Mothers without prenatal care, 1st trimester: Early prenatal care is associated with decreased risk of low birthweight and infant mortality. In 1999, 14.4% of Kentucky mothers did not receive prenatal care during the first trimester of pregnancy, almost unchanged from 14.5% in 1998. This measure ranged from 32.8% in Owsley County to 3.9% in Oldham County.

Unmarried mothers: Unmarried mothers tend to have poorer birth outcomes than married mothers because they are disproportionately young, less educated, and are more likely to be poor. Among the factors related to births to unmarried mothers are higher rates of teenage pregnancy, lack of prenatal care, and low weight births. Statewide, the rate of births to unmarried mothers in 1999 was 303.8 per 1,000 live births, an increase from 300.9 in 1998. Robertson County had the highest rate, at 440.0 per 1,000, and Owen County had the lowest rate, 161.0 per 1,000.

WHITE BIRTHS: Due to the preponderance of whites in the total population of Kentucky (91.9%), birth indicators for the white population closely mirror the total in both ranking and rates, but tend to be slightly lower.

BLACK BIRTHS: The major indicators of birth outcomes continued to be less favorable for blacks than for the rest of the population, but the gap between blacks and whites narrowed for some indicators. The under 18 birth rate for blacks in 1999 compared to whites continued to improve (20.8 to 11.6 per 1,000). For the second year, less than a fourth (22.5%) of black mothers failed to receive prenatal care during the first trimester (compared to 13.5% for whites). However, the percent of low birthweight births to black mothers increased slightly from the previous year and remained at nearly twice the white percentage (14.2 to 7.7). Single-year black birth statistics, in particular, in most Kentucky counties should be used with great caution due to the very small numbers involved.

INFANT MORTALITY: The infant mortality rate is one of the most universal and understandable measures of a population's health status. In 1999 the statewide rate was 7.1 infant deaths per 1,000 live births, the lowest ever recorded in the state. Twenty-seven counties recorded no infant deaths in 1999. Statewide, the infant mortality rate for whites was 6.6 deaths per 1,000 births, and for blacks it was 12.3 per 1,000, a decrease from 14.7 in 1998. One should be particularly careful in using these rates at the county level due to the small numbers involved.

REPORTABLE DISEASE CASES: Despite the significant progress made in the reduction in incidence of infectious diseases in this century, they remain an important cause of illness and death. In addition, surveillance of infectious diseases continues to be of extreme importance in the face of new diseases and newly resistant pathogens which may emerge in the future. This report records the number of cases reported during 1999 of syphilis, pertussis, hepatitis A, hepatitis B, tuberculosis, *Chlamydia trachomatis* infections, animal rabies, and an index of foodborne diseases, the sum of *Salmonella*, *Shigella*, and *Campylobacter* infections.

SOCIOECONOMIC INDICATORS: Economic and social factors have long been associated with health status. Living conditions and health behaviors associated with poverty have such enormous implications for health that they cannot be ignored in any investigation of health status.

Population per primary care provider: This is an indicator of a population's access to medical care. Statewide, there were 2,100 persons per primary care physician, an increase from 1,734 in 1998. The counties exhibited wide variation in this ratio. The highest were Robertson and Hancock, which had no primary care physicians, and the lowest was Rowan County, with 1,018 persons per primary care physician.

Medicaid eligible, FY 1999 and Medicaid utilizers, unduplicated, FY 1999: These indicators measure medical care coverage by the Medicaid program for the financially and/or medically indigent. In state fiscal year 1999, more than one-half million people, 13.7% of the population of Kentucky, were eligible for Medicaid services. The average monthly unduplicated number of utilizers, i.e., eligible members having one or more paid claims, was over 443,446 persons, and comprised 11.2% of the population, an increase from 8.0% in 1998. Owsley County ranked highest in Medicaid eligible percent (43.6) and Oldham County ranked lowest (3.3). The highest Medicaid utilizer percent was in Jackson County (28.3), and the lowest was in Boone County (2.8).

Food stamp recipients, AFDC (Aid to Families with Dependent Children) recipients, and WIC (Women, Infants, and Children) recipients: These measures present data on the proportions of the population who accessed programs for the indigent. In fiscal year 1999, 10.1% of the total population received food stamps. In calendar year 1999, 2.4% received AFDC benefits, and 9.3% of the eligible population were served by the WIC program. Owsley County ranked highest in food stamp percent (38.2), Wolfe County, highest in WIC percent (19.7), and Martin County, highest in AFDC percent (12.2).

Persons in poverty, 1998: Based on 1998 statistics, the most recent available, 15.3% of the population in Kentucky were below the poverty level, a decrease from 17.9% in 1995. Kentucky counties ranged from 35.2% in Owsley County to 4.9% in Oldham County.

Persons < 18 in poverty, 1998: It is estimated that slightly over one-fifth (21.2%) of the total population under the age of 18 lived in poverty in 1998, a marked decrease from 26.0% in 1995. Breathitt County topped the list at 37.8%.

Unemployed: Unemployment rates in 1999 ranged from a high of 15.5% in Taylor County to 1.5% in Jessamine County. The statewide rate was 4.5%.

Median household income, 1998: According to 1998 statistics, the most recent available, the median household income in Kentucky was \$33,955, up from \$28,929 in 1995. By county, median household income ranged from \$60,159 in Oldham County to \$17,015 in Owsley County.

EDUCATION: Educational attainment is closely related to socioeconomic status and also has implications for health.

Mothers with less than 12 years of education: In 1999, over one in five (21.7%) women giving birth had less than a high school education, a slight improvement over the 1998 percent of 22.0. This measure ranged from 43.7% in McCreary County to 8.1% in Oldham County.

Transition rate (1998-1999): This indicator measures the percent of high school graduates who successfully make the transition to employment, military service, or further schooling. Statewide, for the 1998-1999 school year, 95.2% of graduates made the transition successfully. Six counties recorded 100%. Elliott County had the lowest rate at 78.8%.

Dropout rate (1998-1999): During the 1998-1999 Kentucky school year, 4.2% of students in grades 7-12 dropped out of school. This rate ranged from 7.0% in Gallatin County to 0.9% in Lyon County.

OCCUPATIONAL INJURIES: In 1999, there were 117 fatal occupational injuries in the state, 21 agricultural, and 96 nonagricultural. Agricultural injury fatalities decreased, from 30 in 1998, but nonagricultural injury fatalities increased, from 88.

A complete accounting of occupational injuries other than those resulting in fatality is difficult to obtain in Kentucky. The most complete nonfatal injury data available by county are from Workers' Compensation claims, which do not record all occupational injuries, particularly agricultural. Nevertheless, 47,832 nonfatal occupational injuries were reported in 1999, 563 agricultural and 47,269 nonagricultural, all decreases from the previous year.

ADULT ABUSE: Adult abuse and neglect are important causes of injury and death, and they are increasingly recognized as public health problems. In Kentucky in 1998, there were 9,590 substantiated incidents of adult abuse (abuse by someone other than spouse), a rate of 3.3 per 1,000 persons 18 and older and 12,667 substantiated incidents of spouse abuse, a rate of 4.3 per 1,000. (These figures, tabulated for fiscal year 1998, were the most recent available, and are the same figures reported in the 1998 *Profiles*.)

CHILD ABUSE AND NEGLECT: Statewide in calendar year 1999, there were 3,947 substantiated incidents of child physical abuse, 1,117 of child sexual abuse, and 6,568 of child neglect. These translated to rates of 4.1, 1.2, and 6.8 per 1,000 persons under age 18, respectively, all substantial decreases from the previous year.

VIOLENT CRIMES: Violence, both domestic and nondomestic, is increasingly recognized as a serious public health problem. Acts of intentional violence are often related to socioeconomic conditions and have major impact on the health of a community. In 1999, 211 homicides occurred in Kentucky, a decrease from 266 in 1998. The numbers of assaults and robberies were down from the previous year, but the number of rapes increased slightly. Data on violent crimes are reported by county of occurrence.

MOTOR VEHICLE CRASHES: Motor vehicle crashes are one of the greatest causes of unintentional injury and death, and affect all age groups. In 1999, there were 819 persons killed and 54,951 persons injured in motor vehicle crashes in Kentucky. The number of fatalities decreased from the 1998 total of 869, but nonfatal injuries increased from 52,952. Data also indicate that alcohol was a frequently contributing factor, particularly in fatal crashes, in which over a fourth (26.9%) involved drinking drivers. Data on motor vehicle crashes are presented in the health and social indicators table by county of occurrence.

LEADING AND SELECTED CAUSES OF RESIDENT DEATHS

Cause of death statistics have long been among the most ascertainable, readily available, and comparable of all health status indicators for a population. Virtually 100% of deaths are recorded, and causes of death are assigned by established and consistent nosological procedures. Numbers and crude rates for all ages and each of eight age groups, age-adjusted rates (AAR), and years of potential life lost prior to age 75 (YPLL-75) are shown for each leading and selected cause. Explanations of the calculation of age-adjusted rates and YPLL-75 are included in Definitions and Technical Notes in the Appendix. The ten leading causes for the total, white, and black populations, as well as a set of selected causes are presented for each county.

LEADING CAUSES - TOTAL POPULATION: In Kentucky in 1999, there were 38,934 total resident deaths resulting in a crude rate of 983.2 deaths per 100,000 population. The age-adjusted rate (adjusted to the 2000 U.S. standard population) was 1003.2 deaths per 100,000, an increase from 984.2 in 1998. By county, the age-adjusted rate ranged from 1412.6 per 100,000 in Powell County to 760.2 in Larue County.

The top five leading causes of death, diseases of heart, malignant neoplasms, cerebrovascular disease, chronic lower respiratory diseases, and unintentional injuries, accounted for seven of every ten (72.0%) deaths.

Diseases of heart accounted for almost one-third (31.7%) of total deaths, and was the leading cause of death in 1999, as it has been for many years. It was the leading cause in 111 of the state's 120 counties, and also accounted for almost one-fifth (19.5%) of years of potential life lost. The statewide age-adjusted rate was 319.8 deaths per 100,000, up from 311.1 in 1998. The AAR ranged from 550.9 per 100,000 in Robertson County to 196.2 in Washington County.

Malignant neoplasms (cancer), the second leading cause, were responsible for nearly a quarter (22.9%) of deaths statewide, and was the leading cause in nine counties. Malignant neoplasms, being more prevalent than heart disease among persons under 65, accounted for 23.5% of total YPLL. The statewide AAR, 226.4 per 100,000, declined slightly from the 1998 rate of 228.9. Powell County had the highest AAR, 374.2 per 100,000, and Elliott had the lowest, 124.3.

Cerebrovascular disease (stroke), the third leading cause statewide, was responsible for 7.1% of total deaths, but only 2.9% of YPLL. The statewide AAR was 72.9 per 100,000, up from 66.3 in 1998. The AAR ranged from 170.8 per 100,000 in Robertson County to 20.3 in McCreary County.

Chronic Lower Respiratory Diseases (CLRD) (previously called chronic obstructive pulmonary diseases, or COPD) include such diseases as chronic bronchitis, emphysema, and asthma. CLRD was the fourth leading cause of death in Kentucky in 1999, accounting for 5.9% of total deaths. The statewide AAR was 58.6 per 100,000, which was greater than the 1998 COPD rate of 51.9. Among the counties, Elliott had the highest AAR, at 211.6 per 100,000, and Simpson County had the lowest at 17.8 per 100,000.

Unintentional injuries, the fifth leading cause, accounted for only 4.4% of total deaths. However, due to their affect on younger as well as older age groups, they were the third greatest cause of years of potential life lost prior to age 75, making up 15.2% of the total. Unintentional injuries were the leading cause of death for ages 1-34. The statewide AAR was 43.4 per 100,000, up slightly from the 1998 rate of 42.7. The AAR ranged from 123.1 per 100,000 in Fulton County to 9.2 in McLean.

SELECTED CAUSES - TOTAL POPULATION: The following causes were selected as a result of their being included either in the Assessment Protocol for Excellence in Public Health (APEXPH) core data set or in the Centers for Disease Control's consensus set of health status indicators.

Lung cancer accounted for one-third (33.4%) of all cancer deaths and was a major cause of death for persons 45 and older in 1999. The statewide age-adjusted rate was 76.3 per 100,000, down slightly from 79.8 in 1998. Powell County had the highest rate at 176.0 per 100,000, and Menifee County had the lowest, 15.6 per 100,000.

Motor vehicle crashes were the greatest single cause of unintentional injuries resulting in death, responsible for almost half (45.4%) of such deaths. In addition, they accounted for 56.9% of all years of potential life lost due to unintentional injuries. The statewide AAR for motor vehicle crash deaths was 19.4 per 100,000, a decrease from 21.0 in 1998. By county, the AAR ranged from

84.2 per 100,000 in Fulton County to 0.0 (two counties had no resident motor vehicle crash fatalities).

Female breast cancer was responsible for approximately one of every seven (14.7%) cancer deaths in women in 1999. The statewide age-adjusted rate was 27.3 deaths per 100,000 female population, slightly less than 28.1 in 1998. Wolfe County had the highest AAR, at 109.7 per 100,000 women. Eleven counties had no deaths attributable to female breast cancer.

The remaining selected causes, **chronic liver disease and cirrhosis, assault (homicide), congenital malformations, and drug-induced deaths** had relatively low age adjusted rates, but are important indicators for particular age groups and because of their relationships to socioeconomic and lifestyle factors.

LEADING CAUSES - WHITE: As is the case for birth statistics, due to the preponderance of whites in the total population of Kentucky, the leading causes of death for the white population closely mirror the total population in both ranking and rates. However, for most causes of death, white rates tend to be somewhat lower than the population as a whole, e.g., the AAR for all causes was 994.7 per 100,000 for whites compared to 1003.2 for the total population.

LEADING CAUSES - BLACK: Age-adjusted rates for most leading causes of death for blacks were greater in 1999 than those for whites. Statewide, the rate for all causes was 1184.4 per 100,000, higher than the rate of 994.7 for whites, and an increase from 1178.8 in 1998. Blacks experienced the same top four leading causes, but their AARs were considerably higher, with the exception of CLRD. Diabetes mellitus was the fifth leading cause for blacks, with an age adjusted rate of 46.0 per 100,000, compared to a rate of 27.2 for whites. The sixth leading cause was unintentional injuries, with an AAR of 38.6 per 100,000, which was lower than the white rate of 44.0. Assault appeared as the ninth leading cause of death for blacks. Alzheimer's disease, the seventh leading cause among whites, was not among the top ten causes for blacks. The reader should be particularly cautious in using black rates in many counties since they are based on very small populations.

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